

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060471

Luminaire Tested: S124RDR-S575D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060471  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

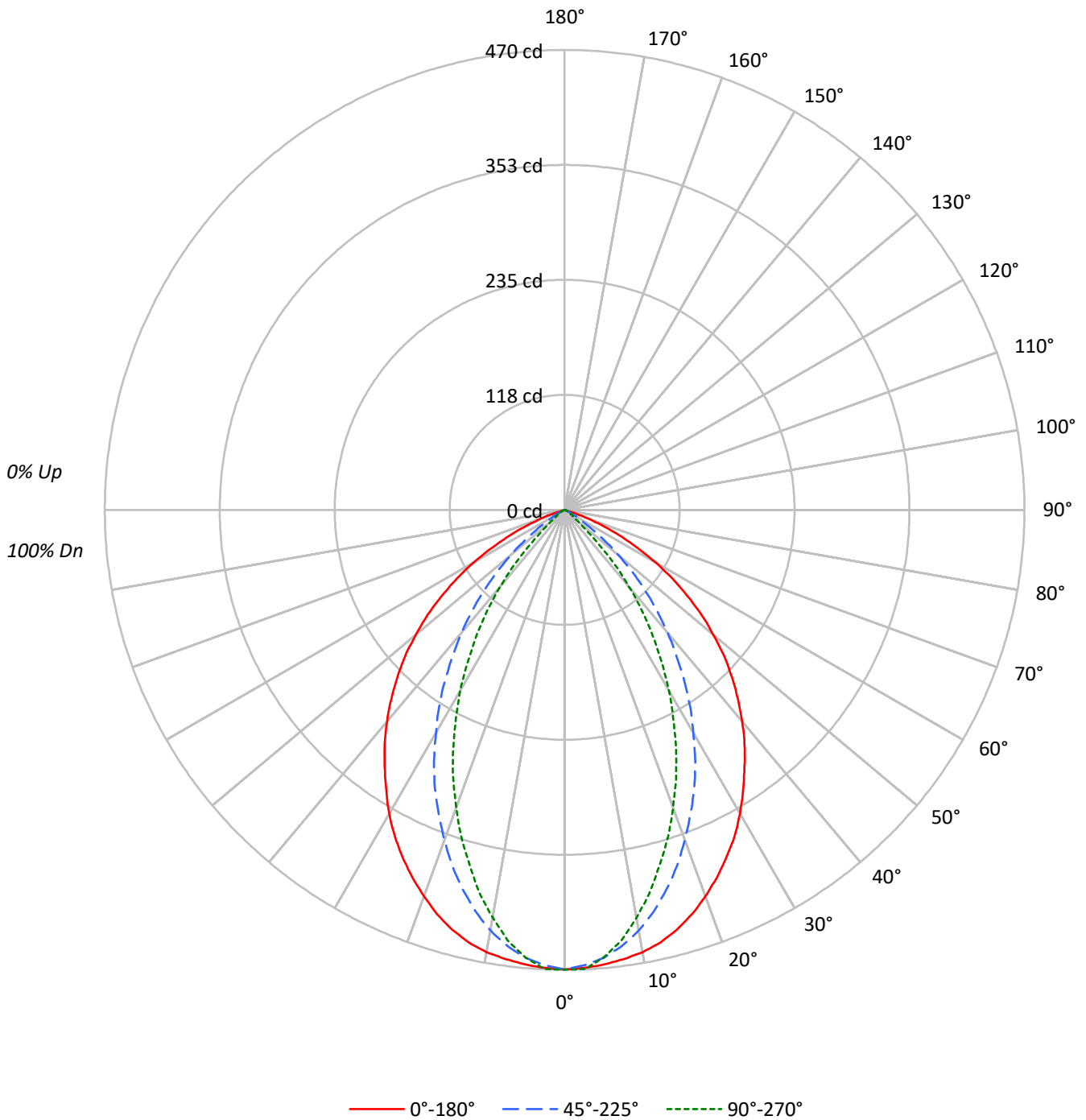
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 613.5 lumens  
Efficiency: N/A  
Efficacy: 31.3 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99		99	97	96		96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87		91	88	86		88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78		84	80	77		82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70		77	73	69		75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63		71	66	62		70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57		66	61	57		65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52		61	56	52		60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48		57	52	48		56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44		54	48	44		53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41		50	45	41		49	44	41	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4046	4046	4046
5°	4032	3973	3968
10°	4013	3818	3699
15°	3958	3583	3347
20°	3852	3292	2967
25°	3722	2981	2561
30°	3565	2612	2120
35°	3369	2241	1648
40°	3174	1839	1152
45°	2943	1414	570
50°	2655	955	192
55°	2294	489	132
60°	1836	176	93
65°	1259	98	41
70°	564	50	35
75°	0	23	23
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2943 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.4	7.1
10°-20°	113.7	18.5
20°-30°	147.2	24.0
30°-40°	139.9	22.8
40°-50°	99.1	16.1
50°-60°	50.9	8.3
60°-70°	17.8	2.9
70°-80°	1.5	0.3
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	304.4	49.6
0°-40°	444.2	72.4
0°-60°	594.2	96.8
0°-90°	613.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	613.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	466	467	460	460	459	44
15°	444	430	402	383	375	125
25°	392	361	314	280	270	180
35°	320	274	213	172	157	200
45°	242	186	116	66	47	186
55°	153	100	33	10	9	137
65°	62	30	5	3	2	61
75°	0	1	1	1	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	469.8	469.8	469.8	469.8	469.8
2.5°	468.5	469.8	465.7	469.1	469.8
5°	466.4	467.1	459.6	459.6	459.0
7.5°	463.0	461.7	449.5	444.7	444.0
10°	459.0	454.2	436.6	426.4	423.0
12.5°	452.8	444.0	420.3	405.3	401.2
15°	444.0	430.4	401.9	382.9	375.4
17.5°	433.2	415.5	381.6	358.5	351.0
20°	420.3	397.9	359.2	333.4	323.8
22.5°	406.7	380.9	336.1	306.9	297.4
25°	391.7	361.2	313.7	280.4	269.5
27.5°	376.1	340.1	289.2	254.6	240.3
30°	358.5	319.1	262.7	226.8	213.2
32.5°	339.5	296.0	239.0	200.3	184.0
35°	320.5	273.6	213.2	171.8	156.8
37.5°	302.1	252.6	187.4	143.9	129.7
40°	282.4	229.5	163.6	118.8	102.5
42.5°	262.1	207.1	139.2	93.0	75.4
45°	241.7	186.0	116.1	66.5	46.8
47.5°	221.3	163.6	93.7	42.1	25.1
50°	198.2	141.9	71.3	22.4	14.3
52.5°	176.5	121.5	50.9	12.9	10.9
55°	152.8	100.5	32.6	9.5	8.8
57.5°	130.4	80.1	18.3	7.5	6.8
60°	106.6	61.8	10.2	6.1	5.4
62.5°	82.8	44.8	6.8	4.1	3.4
65°	61.8	29.9	4.8	2.7	2.0
67.5°	40.7	17.0	3.4	1.4	1.4
70°	22.4	8.1	2.0	1.4	1.4
72.5°	8.1	2.7	1.4	0.7	0.7
75°	0.0	0.7	0.7	0.7	0.7
77.5°	0.0	0.0	0.0	0.0	0.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)